

C1 6. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a weight average molecular weight of at least 250,000 g/mol.

7. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a co-monomer content of less than 10 mol%.

8. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a co-monomer content in the range of 0.5-5 wt%.

A1 9. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a wear coefficient below $2.0 \cdot 10^{-4}$ mm³/mN.

10. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a polydispersity below 5.

11. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a polydispersity in the range of 2-4.

C1 12. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a melting point of at least 100° C.

13. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a melt viscosity of less than $5 \cdot 10^5$ Pa.s.

14. (Amended) The polyethylene according to claim 1, wherein said polyethylene has a number average molecular weight of at least 100,000 g/mol.

15. (Amended) A process comprising melt-processing the polyethylene according to claim 1.

A2 17. (Amended) An article obtained by the process according to claim 15.

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18. (Amended)

An article comprising the polyethylene according to claim 1.

Please add new claims 21-35.

21. (New) The polyethylene according to claim 3, wherein said polyethylene has a weight average molecular weight below 700,000 g/mol.

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22. (New) The polyethylene according to claim 3, wherein said polyethylene has a weight average molecular weight below 500,000 g/mol.

23. (New) The polyethylene according to claim 3, wherein said polyethylene has a weight average molecular weight of at least 250,000 g/mol.

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24. (New) The polyethylene of according to claim 3, wherein said polyethylene has a comonomer content of less than 10 mol%.

25. (New) The polyethylene according to claim 3, wherein said polyethylene has a comonomer content in the range of 0.5-5 wt%.

26. (New) The polyethylene according to claim 3, wherein said polyethylene has a wear coefficient below $2.0 \cdot 10^{-4} \text{ mm}^3/\text{mN}$.

27. (New) The polyethylene according to claim 3, wherein said polyethylene has a polydispersity below 5.

28. (New) The polyethylene according to claim 3, wherein said polyethylene has a polydispersity in the range of 2-4.

29. (New) The polyethylene according to claim 3, wherein said polyethylene has a melting point of at least 100°C .

30. (New) The polyethylene according to claim 3, wherein said polyethylene has a melt viscosity of less than $5 \cdot 10^5$ Pa.s.

31. (New) The polyethylene according to claim 3, wherein said polyethylene has a number average molecular weight of at least 100,000 g/mol.

32. (New) A process comprising melt-processing the polyethylene according to claim 3.

33. (New) The process of claim 32, wherein said process includes injection molding said polyethylene.

34. (New) An article obtained by the process according to claim 32.

35. (New) An article comprising the polyethylene according to claim 3.